

Please amend the claims as follows:

1. **(Currently Amended)** An ion-assisted electron beam evaporation process,
the process comprising the steps of:

- positioning multiple high yield fixtures in an array;
- adjusting a vertical position of each of the fixtures to compensate for variations in
deposition rate versus chamber location;
- providing two electron guns;
- mounting the guns to a movable track;
- positioning the first gun at a source deposition location;
- rotating the fixtures at greater than 2400 rpm;
- performing ion assisted evaporation with the first gun, the second gun being kept
in a stand-by location in pre-heat mode;
- ceasing deposition prior to achieving target thickness on each fixture by;
- shuttering each of the fixtures ~~at different times~~;
- independently reopening the fixtures to resume deposition at a low rate pulsed
deposition to achieve the target thickness;
- closing ~~each~~ shutters on the fixtures;
- moving the first gun to a stand-by position;
- moving the second gun to the source deposition location;
- sampling evaporation with a quartz crystal thickness monitor;
- opening a shutter on the second gun;

performing ion assisted evaporation with the second gun, the first gun being kept in a stand-by location in pre-heat mode;

ceasing deposition prior to achieving target thickness on each fixture by;
shuttering each of the fixtures ~~at different times~~;

independently reopening the fixtures to resume deposition at a low rate pulsed deposition to achieve the target thickness;

closing ~~each~~ shutters on the fixtures; and

repeating the process until desired filter is obtained.

2. (Currently Amended) A method for producing an optical filter utilizing line-of-sight deposition, the method comprising the steps of:

providing multiple substrates;

providing a fixed ion source;

providing at least one selectively movable evaporator, the evaporator being positionable at a source deposition location and at a stand-by location spaced from the ion source a distance greater than the distance the source deposition location is spaced from the ion source;

positioning the at least one evaporator at a the source deposition location; and,
depositing material onto the substrates.

3. (Original) The method of Claim 2, wherein the method further comprises the step of:

shuttering the substrates as necessary to ensure uniform deposition on the substrates.

4. **(Original)** The method of Claim 3, where in the method further comprises the step of:

rotating the substrates at approximately greater than 500 revolutions per minute.

5. **(Currently Amended)** The method of Claim 4, wherein shuttering the substrates as necessary to ensure uniform deposition on the substrates comprises the steps of:

ceasing deposition of a layer prior to achieving target thickness; by shuttering the substrates ~~at different times~~;

independently unshuttering the substrates to resume deposition; and,

achieving the target thickness.

6. **(Currently Amended)** The method of Claim 2, wherein the at least one evaporator is at least two selectively movable evaporators, the method further comprising the steps of:

moving the first evaporator to a the stand-by position;

opening a shutter on the second evaporator;

positioning the second evaporator at the source deposition location; and,

performing ion assisted evaporation with the second evaporator.

7. **(Currently Amended)** The method of Claim 6, wherein the method further comprises the steps of:

ceasing deposition of a layer prior to achieving target thickness; by shuttering the substrates ~~at different times~~;

independently unshuttering the substrates to resume deposition; and,

achieving the target thickness.

8. (Original) The method of Claim 7, wherein after moving the second evaporator into the source deposition location, the method comprises the step of:
sampling evaporation with a quartz crystal thickness monitor.

9. (Original) The method of Claim 8, wherein the method further comprises the steps of:
closing clam shutters on the substrates; and,
repeating the process until desired filter is obtained.

10. (Original) The method of Claim 9, wherein providing multiple substrates comprises the step of:
providing a dense high yield fixture array having multiple, independently shutterable fixtures, each of the fixtures containing multiple substrates.

11. (Previously Amended) A system for producing optical filters using line-of-sight deposition, the system comprising:

multiple substrates;
an ion source;
a source deposition location;
a standby location spaced from the ion source a distance greater than the distance said source deposition location is spaced from the ion source; and
at least one selectively movable evaporator said evaporator being positionable at said source deposition location and at said stand-by location.

12. **(Original)** The system of Claim 11, wherein the system further comprises:
shuttering means for shuttering the substrates; and, a vacuum chamber.
13. **(Original)** The system of Claim 12, wherein the substrates are rotated at
approximately greater than 500 revolutions per minute.
14. **(Original)** The system of Claim 13, wherein the substrates are attached to
high yield fixtures, the fixtures being independently shutterable.
15. **(Original)** The system of Claim 14, wherein the fixtures rotate and are
adjustable.
16. **(Original)** The system of Claim 15, wherein the system further comprises:
a quartz crystal thickness monitor.
17. **(Original)** The system of Claim 16, wherein the evaporators are connected
to a movable track, the movable track being opposite the fixtures in the vacuum chamber.
18. **(Original)** The system of Claim 17, wherein the vacuum chamber is
approximately 60 inches by 80 inches.
19. **(Currently Amended)** An optical filter produced by the method of
Claim ~~2~~ 6.
20. **(Original)** The method of Claim 4, wherein rotating the substrates at
greater than 500 revolutions per minute comprises the step of:
rotating the substrates at greater than 2400 revolutions per minute.
21. **(Original)** The system of Claim 13, wherein the substrates are rotated at
greater than 2400 revolutions per minute.

22. (Previously Presented) The system of Claim 11, wherein the system comprises at least two selectively movable evaporators.

23. (New) A method of making an optical filter by ion assisted deposition comprising the steps of:

- mounting one or more substrates in a deposition chamber;
- mounting an ion source within the chamber
- positioning a first evaporator at a source deposition position located within the chamber proximate the ion source;
- positioning a second evaporator at a standby position located within the chamber remote from the ion source;
- depositing a first material from the first evaporator on the one or more substrates;
- ceasing deposition of the first material;
- positioning the first evaporator at a standby position within the chamber remote from the ion source;
- positioning the second evaporator at the source deposition position;
- depositing a second material from the second evaporator on the one or more substrates; and
- ceasing deposition of the second material.

24. (New) A method of making an optical filter by ion assisted deposition comprising the steps of;

- exposing one or more substrates to a first evaporator positioned at a source deposition location;

shielding the one or more substrates from a second evaporator positioned at a standby location laterally spaced from the source deposition location;

depositing a layer of a first material on the one or more substrates;

exposing the one or more substrates to the second evaporator positioned at the source deposition location;

shielding the one or more substrates from the first evaporator positioned at the standby location; and

depositing a layer of second material on the one or more substrates.